

<110> Searle/Monsanto
 Phippard, Deborah
 Vasanthakamur, Geetha
 Dotson, Stanton
 Ma, Xiao-Jun

<120> Osteoarthritis tissue-derived nucleic acids, polypeptides,
 vectors, and cells

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<212> DNA
<213> Homo sapiens

<223> unsure at all n locations
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2559

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 <211> 981
 <212> DNA
 <213> Homo sapiens

<400> 22

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 <211> 835
 <212> DNA
 <213> Homo sapiens

<400> 23

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 <213> Homo sapiens

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 <211> 1642
 <212> DNA
 <213> Homo sapiens

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20

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 <211> 163
 <212> DNA
 <213> Homo sapiens

<400> 26

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<210> 27
 <211> 1746
 <212> DNA
 <213> Homo sapiens

<223> unsure at all n locations
 <400> 27

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<212>	DNA
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 <211> 1563
 <212> DNA
 <213> Homo sapiens

<400> 29

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 <211> 2263
 <212> DNA
 <213> Homo sapiens

<223> unsure at all n locations
 <400> 30

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 <212> DNA
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 <223> unsure at all n locations
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 <213> Homo sapiens

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<210> 52
 <211> 281
 <212> DNA
 <213> Homo sapiens

<400> 52

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ccacaacccc ctgaaaagca tcccggacaa tgcttccag tcctttggca gatacctgga 180
gacctcttgg ctggacaaca ccaacctgga gaagttctca gatggtgcct tcctgggtgt 240
aaccacgctg aaacacgtcc atttgagaa caaccgcttg a 281
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<210> 53
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 53

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gggacagatc ccagggtgcc caggagctt ccaagtgcct cactcctccc gccgcaaaca 60
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gcagcccccc ggcgtacgct acgctgacgg tgaagccctc cagccccgcg cggctgctca 180
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ccttctactt aa 252
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<210> 54
 <211> 2723
 <212> DNA
 <213> Homo sapiens

<400> 54

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<210> 55
 <211> 310
 <212> DNA
 <213> Homo sapiens

<400> 55

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 cccagaactg cactgccac agcgacctgc agcacgtcat ctgcgacaag gtggggctgc 180
 agaagatccc caaggtgtca gagaagacca agctgtctca cctacagcgc aacaacttcc 240
 cgggtgctggc tgccaattcg ttccggggcca tgccgaacct cgtgtcattg cacctgcagc 300
 actgccagat 310

<210> 56
 <211> 274
 <212> DNA
 <213> Homo sapiens

<400> 56

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 gacaccaggg acagcaatga gctgactct cctgcatctc ctttgtctga ggcatagacc 120
 actgactgct tatggaaaag aacagataat gatatccgtc tctgtcttcc acccaccact 180
 caatgtaact ttctgccatg aacataacca gccacacata aactgtctgc agaaaaggaa 240
 gttccatcct ataagcttgg caggaggata aaga 274

<210> 57
 <211> 153
 <212> DNA
 <213> Homo sapiens

<400> 57

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 cacaaaacta atcattattt aaagttattt ccg 153

<210> 58

<211> 225
 <212> DNA
 <213> Homo sapiens

<400> 58

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 atattggttt taccttcaga agaataattta gtttctactca ggttttttcaa agctacgctg 120
 tcccccaaaa aacgaaacaa aacaaaaaaa caaccttttt aagagttgat ggctactcat 180
 ttgatctgcc tcctctgctg aatcaattag gaattttttt ttttt 225

<210> 59
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 59

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 gaatcattat ttttttccca aggagaaaac cggggtaaag ggaggggaagc aattcaattt 180
 gaagtcctcg tgaatgggct ttcagaaggc aattaaagaa atccactcag agaggacttg 240
 gggtgaaact tgggtcctgt ggttttctga ttgtaagtgg aagcaggtct tgcacacgct 300
 gttggcaaact gtcaggacca ggtaagtga ctggcagaaa aacttccagg tggaacaagc 360
 aaccaggtt ctgctgcaag cttggaagga gcctggagcg ggagaaagct aacttgaaca 420
 tgacctgttg catttggaac gttctagc 448

<210> 60
 <211> 59
 <212> DNA
 <213> Homo sapiens

<400> 60

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<210> 61
 <211> 321
 <212> DNA
 <213> Homo sapiens

<223> unsure at all n locations
 <400> 61

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 gccactaggc tgtgtccac agtcagtgtc acccagtga caggcattac ccccatctct 180
 ggaaccagcc tggccccaag ggctacggca taactcagta ccaggtagag ttggcccccac 240
 agagtacctt tccccagata tgcaacgcca gcgaaagacc aagcgcaaaa ccaaagagca 300
 gctggctatc cttaaactct t 321

<210> 62
 <211> 252

<212> DNA
 <213> Homo sapiens
 <400> 62
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 aaaaatggga aaagactatg aatagacggg acccagaaaa gcacatacaa ataagtggct 120
 attttactac acctttactt tggaaaactt caaacctgta ctaaaataga atagggcagt 180
 gaacctccct gcctgcaccc atcactcagc gtcaacattg atcaactcat gggcaatctt 240
 gttttatcta tt 252

<210> 63
 <211> 218
 <212> DNA
 <213> Homo sapiens
 <400> 63
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 tgtgctcatg tgggagtaca gatgtgtata tacagacatg tacattttta aagacttggt 120
 tgtctctgca gtgaagacaa tatgttttat tttttattcc atatacttct ctgtattttc 180
 tatatttgct tcaataagct ggtgtaactt ttaatttt 218

<210> 64
 <211> 235
 <212> DNA
 <213> Homo sapiens
 <400> 64
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 gaaaagcata attctgagct aaatatcttg cctaaagaat ctctttcaca taatccttcc 180
 tggtcacttg ctcttgcac tcacaatttg tttcttaatt cctatgcttt ttatc 235

<210> 65
 <211> 239
 <212> DNA
 <213> Homo sapiens
 <400> 65
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 atctggtaat ttaaacaatt gagatagcaa aagtgtttta cagactagga taattttttt 120
 ttcataattg ccaaaatttt tgtaaacctt gtcttgtcaa ataagtgtat aatattgtat 180
 tattaattta tttttacttt ctataccatt tcaaaacaca ttacactaag ggggaacca 239

<210> 66
 <211> 243
 <212> DNA
 <213> Homo sapiens
 <400> 66
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tgacattcag atttttcaga ggtctgccca agggctctggt ttttattttg cttgaatata 120
 agttctgaca ggaaagggca ccagggtgcg gggtcattga aaacaaagt gacagtttag 180
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 ttc 243

<210> 67
 <211> 250
 <212> DNA
 <213> Homo sapiens

<400> 67
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 ttcattgaac agttatatag tgctttggaa gtatcaagtc ctgtgctaaa taaatgctgg 180
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 gtgcccagg 250

<210> 68
 <211> 213
 <212> DNA
 <213> Homo sapiens

<400> 68
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 tagtcatatg ttcttttaga actttacact tctattcttt attgccctgt attataattg 180
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<210> 69
 <211> 198
 <212> DNA
 <213> Homo sapiens

<400> 69
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 attaacagaa gatgtggaga tacagaagaa actagaaaat atctcacaat caatacatct 120
 ttcaagcagt caatcatttg tcaactcatat tgctttttta aaccagctt tacatggaag 180
 gaataaatgg aactccag 198

<210> 70
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 70
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 caaactgttt tcataagaac gctaagggtc tatgtgcctt tttaactcat tctctcacga 180

gtgttcagtg gagttttcca gaggtctgt gacatgggtga catcactctg ataattagta 240
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 ctggctatatt tcatttatac ctgctgctga gtc 393

<210> 71
 <211> 216
 <212> DNA
 <213> Homo sapiens

<400> 71
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 ccaccagtt cctccctcag tatcacatta tttttttctt ctgcttttca ttaacctaac 180
 tcattctatc agtacaacca ttttcttatt ctctaa 216

<210> 72
 <211> 166
 <212> DNA
 <213> Homo sapiens

<400> 72
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 ggctaagact ttatttaa at acaggatgga tgggtgttttg actgaagatg cctccaactt 120
 ttgctcttct gttttttatt tgatgtgctc aagcttctaa ttccct 166

<210> 73
 <211> 240
 <212> DNA
 <213> Homo sapiens

<400> 73
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 aattattttt ccacattgaa acactttgca gacacaaata tctatgaaaa gatgctttgt 120
 cagccactgt gccttttttt ctgtgaagac tcaacggatg tgtgtgtttg tatgtttgtt 180
 aacagttaca tatgtttgta tgagtgtata tatatatctg tgtgtgtgta tctctaactg 240

<210> 74
 <211> 291
 <212> DNA
 <213> Homo sapiens

<400> 74
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 tcccacgggc ttgggggaaa gatgggggg accaaggcct ggggtgttct cttcttggtc 180
 ctggaagtca catctgtgtt ggggagacag acgatgctca ccagtcagt agaagagtc 240
 cagcctggga agaagaacct cagcatcttt gccaaagcct cgcacacct g 291

<210> 75
 <211> 283
 <212> DNA
 <213> Homo sapiens

<400> 75
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 cctgcagtgc cagctctcaa tcgcacaggg gaccagggc ctggccccctc catccagaaa 180
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 aactacctgg gcccccttt caacgagcca gacttcaacc ctc 283

<210> 76
 <211> 139
 <212> DNA
 <213> Homo sapiens

<400> 76
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 agttggatg atgttcaagt tagataacaa aatgtttata ccattagaa cagagaataa 120
 atagaactac atttcttgc 139

<210> 77
 <211> 669
 <212> DNA
 <213> Homo sapiens

<400> 77
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 gtgtgagcat ttaagaagca tcctctgcca agaccaaag gaaagaagaa aaagggccaa 180
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 caatgagaat cttcatgtat tctggagaac accattctctg atttcccaca aactgcacta 540
 catcagtata actgcatttc tagtttctat atagtgaat agagcataga ttctataaat 600
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 tctaaaaaa 669

<210> 78
 <211> 486
 <212> DNA
 <213> Homo sapiens

<400> 78

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 ccagcctgga cccagggccc gagggaatga ggaagcaaag aagaaggcct gggaacattg 180
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 gaaagacccc tacagatctg acctctccct gacagacaac catctctttt tatattatgc 300
 cgctttcaat ccaacgttct cactctggaa gaagagagtt tctaatacaga tgcaacggcc 360
 caaattcttg atctgcagct tctctgaagt ttggaaaaga aaccttctt tctggagttt 420
 gcagagttca gcaatatgat agggaacagg tgctgatggg cccaagagtg acaagcatac 480
 acaact 486

<210> 79
 <211> 752
 <212> DNA
 <213> Homo sapiens
 <223> unsure at all n locations
 <400> 79

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 nnnnnngccac tgctgcaccg gtcctcgtag atggagatct caatctgggg tcggtgggta 180
 aggagagctg caagcccagc tgctgagcag ggggtgggac atgaaccagc ggatggagtc 240
 cagcagggga gtgggaaagt gggcttgctg tgctgcctag acagtaggga tgtaaaggcc 300
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 ctctgaaggc caggccctgt gctgggcaca tagctgtgat cacagcagac agggtcgctg 420
 ccctgatggc gcttacattc cagtgggtct aatgaccata tcttaggaca cagatgtgcc 480
 caggagagtg gtgtactgc acaggaagta tgaggacttt agtgcctga gttcaaattc 540
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 cattatcgca tctgcaaat ggggattaag aatagaatct tggggtagt gtggagatta 660
 gattaaatgt atgtaagaca cttggcaca aacctggnac atagtaaagg ctcaataaaa 720
 acaagtgcct ctactgggc tttgtcaaca cg 752

<210> 80
 <211> 552
 <212> DNA
 <213> Homo sapiens
 <223> unsure at all n locations
 <400> 80

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 agaatagagc tatgcaaat ctgttaaaaa ctatgaggaa aacttatatt agaacttttg 180
 atatatata aaatactgat tatcttaatc acattttccc cagagataaa cattgagaga 240
 acgaaagcca aagtgtcatt taagagagat atatatgaaa aagtaacatt aatatataga 300

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<210> 81
 <211> 135
 <212> DNA
 <213> Homo sapiens

<400> 81
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 ttccaagtgt ggctt 135

<210> 82
 <211> 225
 <212> DNA
 <213> Homo sapiens

<400> 82
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 acacacgtat ctgggtgtgc attggaatca tccgaaaaaa ccaaggcttg cattgcatat 120
 ctatctgtg tctgctgaag gagccctgtc tgtgtgccca aggaagtgc atccttgcca 180
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